AOpen
Digital Engine
DE965-Pro

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Open Mind & Global Vision

Empowered your Applications

Digital Engine

Digital Entertainment	Digital Health	Digital Office	Digital Signage	Game machine	KIOSK	POS
PC TV IPTV DMA STB Car PC	Panel PC Low Radiation Low Noise Less Cables	Thin Client Secured PC Trusted PC PC Projector	Small Size AD Quick Boot NAND Flash Easy Maintenance	Arcade Game Dart Dancing	Touch Panel	Dual Display COM Ports CF Flash

DE965-Pro Specification

CPU

Socket P 479 Intel Core™ 2 Duo (Penryn, Merom), Celeron M CPU

FSB 800/533 MHz

CHIPSET

North Bridge: Intel GM965

South Bridge: Intel ICH8M

MEMORY

DRAM Support : Dual Channel DDRII SO-DIMM 667/533

DDRII SO-DIMM x 2 up to 4GB

GRAPHICS

Intel GMA X3100 on board

LAN

Realtek GbE LAN controller RT8111C

AUDIO

Realtek HD AUDIO CODEC ALC662

EXPANSION SLOT

mini card *1

SYSTEM BIOS

Award PnP 4Mb Flash ROM BIOS

FRONT PANEL I/O

USB 2.0 port *2

PWR LED (Blue)

HDD LED (Blue)

Power Button

REAR PANEL I/O

HDMI x 1 (HDMI 1.2)

USB 2.0 port x 2

LAN RJ45 Jack x 1

Dual VGA

Audio Jack Stereo x 1 (Microphone in / Line out)

Legacy RS232 serial port x 1

DC 19V connector x 1

Wireless / TV Tuner antenna hole x 1

DRIVE BAY

For 2.5” S-ATA 2 HDD *1

For Slim Optical Device *1 (IDE)

FORM FACTOR

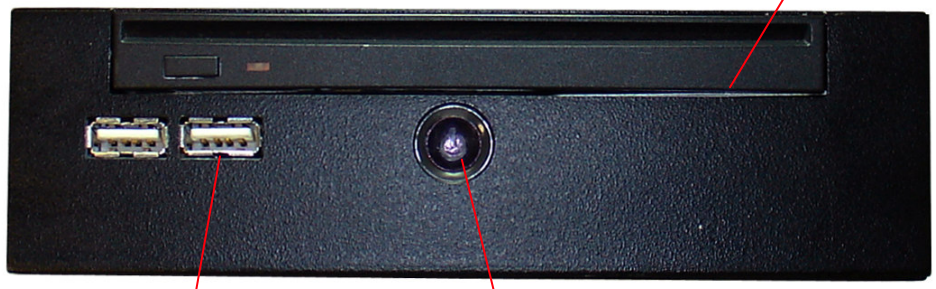
166mm(W)x156mm(D)x48mm(H)

Housing material SECC, t=0.8mm

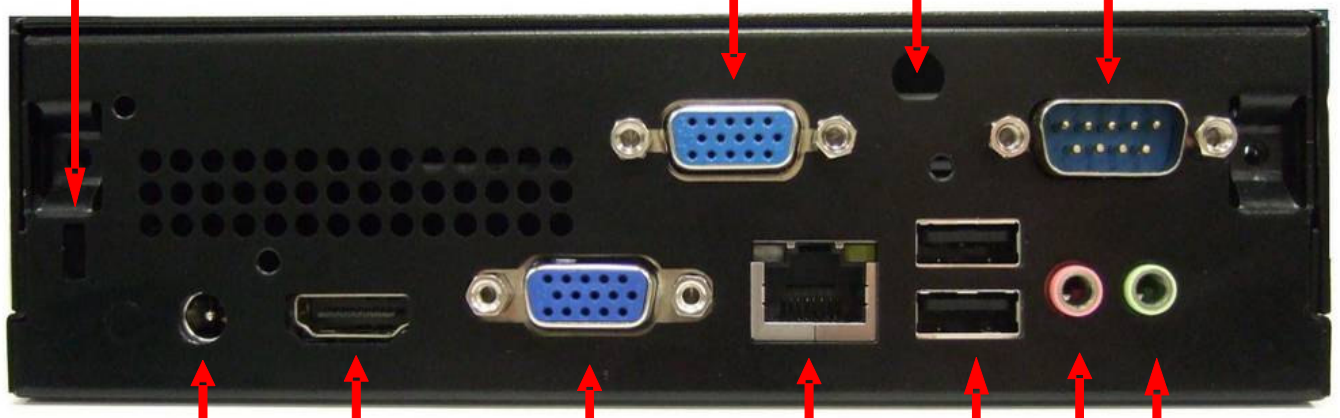
Weight (Kg/Pound): 1.23 kg / 2.72 pound (N.W.)

All specifications above are subject to change without prior notice.

Front outlook



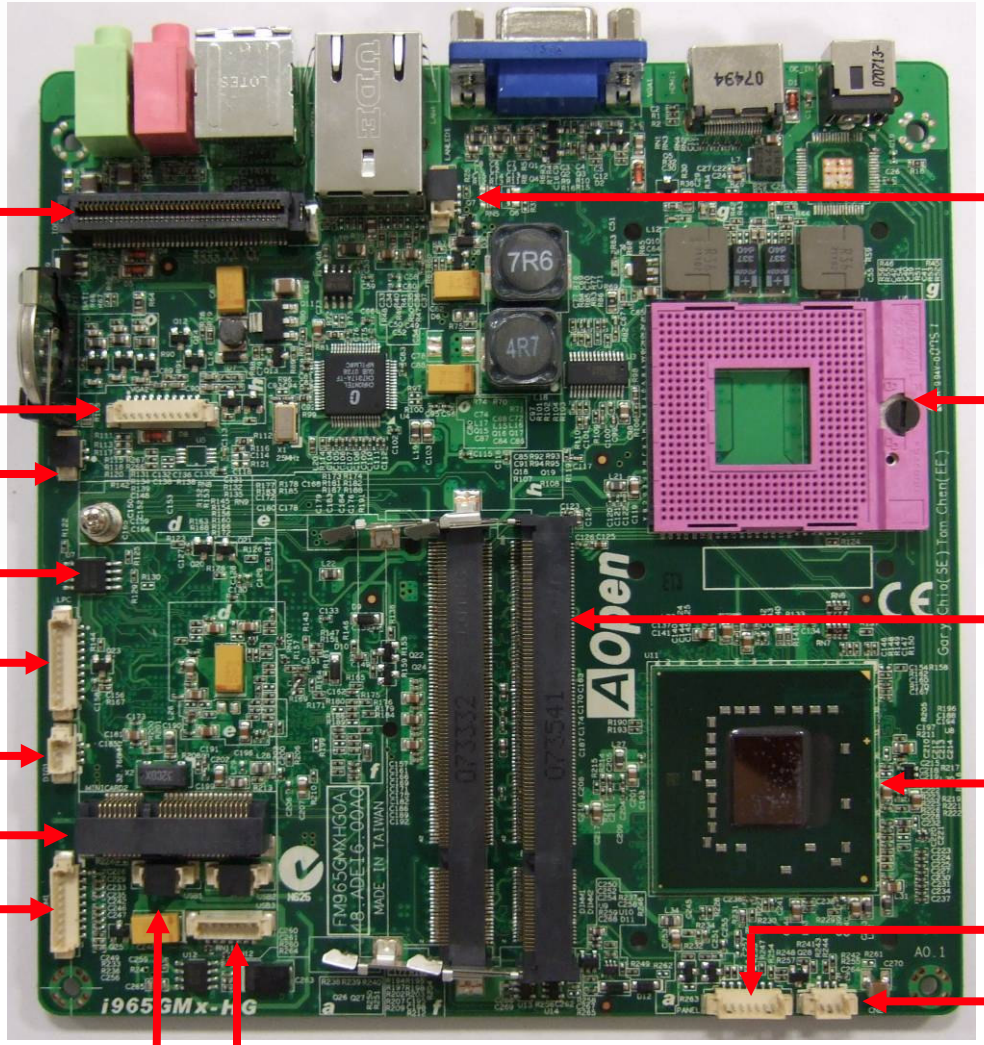
Rear I/O


Kensington lock hole
VGA2
Antenna hole
COM port
DC 19V
HDMI
VGA1
LAN
USB 2.0
Mic in
Line out

Supports Dual Displays

- **Supports dual Displays through Y-type cable on DVI/VGA connector**

MB Outlook Component side



Environment Specification

- **Temperature:**

  Operating: -10℃ ~ 55℃

  Non-Operating: -30℃ ~ 65℃
- **Humidity:**

  95% RH(55℃ non-condensed)
- **Vibration: (Random Vibration, with ODD)**

  Operating: 0.45Grms, 10 ~ 500Hz

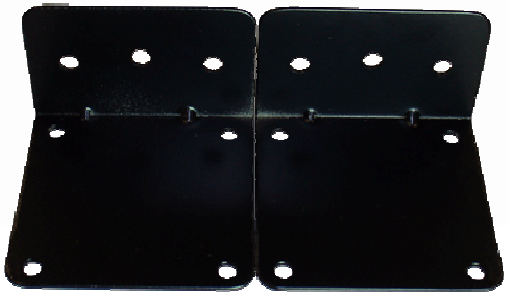
  Non-Operating: 2Grms, 5 ~ 500Hz
- **Shock:**

  Operating: Half Sine, 8G, 11ms

  Non-Operating: Half Sine, 50G, 11ms
- **Drop test: IEC 60068-2-32**

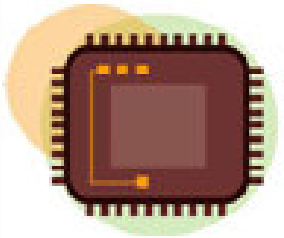
L Holder (attach under the table)

Included with every Digital Engine



Watch Dog Timer – Hardware Ready

- Winbond W83267 chip
- Source code provided by request
- What is watchdog timer?



A watchdog timer is a useful tool in helping your system recover from transient failures. Since it is so common to find watchdogs built into modern microcontrollers, the technique is effectively free. If you are working on a mission-critical system, then either common sense or a regulatory body will insist that you use a watchdog. It's always a good idea to make your systems more self-reliant.

Secure Power Adapter cable

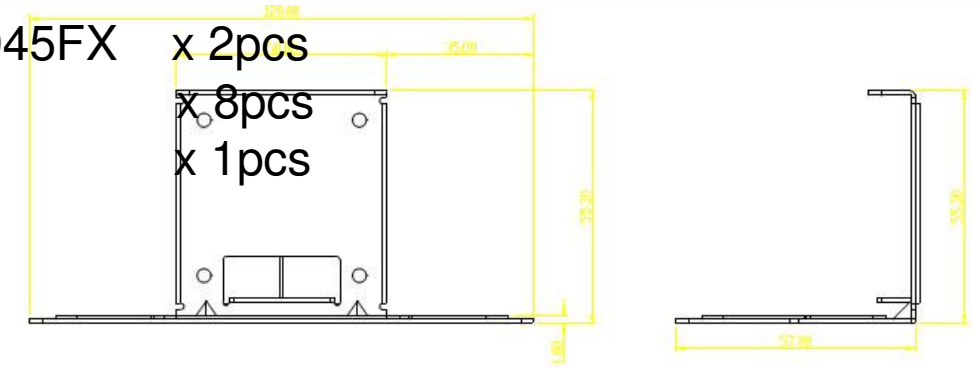
Optional Kits

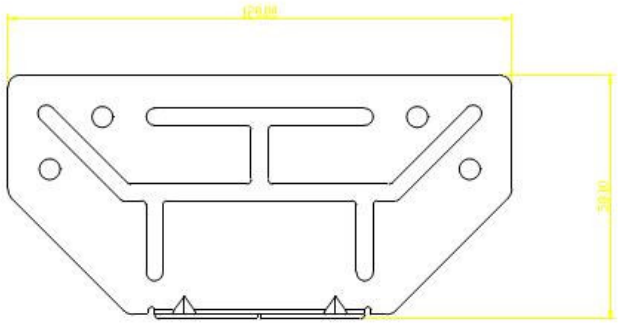
1. VESA Wing (Optional)

Note: L-Holder is included with every Digital Engine!

Vesa Wing:
P/N：59.ADE03.0010 - ASSY MONITOR H/D PACK DE-945FX
Include

HOLDER MONITOR SECC DE-945FX	x 2pcs
SCREW_FPHM3X4_EHU1616U	x 8pcs
BAG SCRW PE 105*60 MT85	x 1pcs





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2. Tuner Kits (Optional)

- MC770A Hybrid TV mini Card (DVB-T and Analogue)
- Main IC
  - DVB-T Demodulator : DIBCOM DIB7700
  - Tuner : +VIF / SIF XC3028
  - Video Decoder : CX3028
- Functional Specifications
  - MiniCard hybrid DVB-T and Analog TV tuner card
  - Watch digital and analog TV in Windows on your notebook
  - Bring TV function to Media Center Edition 2005
  - Free to air digital terrestrial DVB-T receptions (6/7/8 MHz)
  - Support High Definition digital TV channel
  - Advanced Silicon Tuner for worldwide analog TV receptions
  - Interactive , Teletext EPG ,and scheduler

3. Wireless kits (Optional)

- 802.11b/g, 54Mbps wireless LAN PCIe mini Card
- Main Chipset
  - Baseband / MAC / RF: Atheros AR2423

- Functional Specifications
  - Standard: IEEE802.11b; IEEE 802.11g; IEEE 802.11i
  - Bus Interface: PCI Express mini Card
  - Security: 64-bit, 128-bit and 152-bit WEP, AES, TKIP, WPA2
  - Operating Voltage: 3.3 V ±5% I/O supply voltage
  - Data Rate:
    802.11g compliant: 11, 5.5, 2, 1 (DSSS/CCK); 6,9, 12, 18, 24, 36, 48, 54, 108 (OFDM) Mbps data rates